5

Figure 1

Polynucleotide sequence of Human BMP2A gene (gi: 179501 and 4557368) (SEQ ID NO:1) (Coding sequence: 324 – 1514)

	1	aaaaaattat	tannattaan	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	. 1		
	61	taccacacac	gaacttgta	yggagaataa	cttgcgcacc	ccactttgcg	ccggtgcctt
	121	tgccccagcg	gageetgett	cgccatctcc	gagccccacc	gcccctccac	tcctcggcct
	101	rycccyacac	Lgagacgctg	ttcccagcgt	gaaaagagag	actgcgcggc	cggcacccgg
10	TOT	gagaaggagg	aggcaaagaa	aaggaacqqa	cattcggtcc	ttacaccada	tcctttaacc
10	241	agagtttttc	catgtggacg	ctctttcaat	ggacgtgtcc	ccacatactt	cttagacgga
	201	eracaarere	ctaaaggtcg	accatggtgg	ccqqqacccq	ctatcttcta	acattactac
	201	LLCCCaygl	cereeragge	ggcgcggctg	gcctcgttcc	qqaqctqqqc	cacaggaagt
	421	regeggegge	gregreggge	cgcccctcat	cccaqccctc	tgacgaggtc	ctgagggagt
	481	tcgagttgcg	gctgctcagc	atgttcggcc	tqaaacaqaq	acceacece	accaddaacd
15	247	cegrageses	cccctacatg	ctagacctgt	atcqcaqqca	ctcaggtcag	ccaaactcac
	OOT	cegeeecaga	ccaccggttg	gagagggcag	ccaqccqaqc	caacactgtg	cacaacttcc
	001	accatgaaga	atctttggaa	gaactaccag	aaacgagtgg	gaaaacaacc	cagagattet
	121	CCCCCaaccc	aagttctatc	cccacggagg	agtttatcac	ctcagcagag	cttcaggttt
	781	tccgagaaca	gatgcaagat	gctttaggaa	acaatagcag	tttccatcac	ccaattaata
20	841	tttatgaaat	cataaaacct	gcaacagcca	actcgaaatt	ccccataacc	agacttttag
	901	acaccaggtt	ggtgaatcag	aatqcaaqca	ggtgggaaag	ttttaatata	agaccccagta
	961	tgatgcggtg	gactgcacag	qqacacqcca	accatggatt	cataataaaa	atagacaact
	1021	tggaggagaa	acaaggtgtc	tccaagagac	atgttaggat	aaccacatct	ttggaggaaa
	1081	atgaacacag	ctggtcacag	ataaggccat	tgctagtaac	ttttaaccat	antaganana
25	1141	ggcatcctct	ccacaaaaga	gaaaaacgtc	aagccaaaca	Casacacaca	yargyaaaag
	1201	agtccagctg	taagagacac	cctttataca	tggacttcag	tanactagegy	adacycetta
	1261	ggattgtggc	tececaaaa	tatcacacat	tttactgcca	cgacgtgggg	rygaargact
	1321	taactaatca	tctgaactcc	actaatcata	ccattgttca	cygagaatgc	ccttttcctc
	1381	actictaagat	tcctaaggca	tactatata	cgacagaact	gacgttggtc	aactctgtta
30	1441	accttgacga	caatcaaaac	attatatta	cyacayaact	cagtgctatc	tcgatgctgt
	1501	ataaatataa	ctactacaca	gerytatiaa amaattaaat	agaactatca	ggacatggtt	gtggagggtt
	1001	y cygy cy cog	clagiacayo	aaaaccaaat	acataaatat	atatata	

Figure 2

Polypeptide sequence of human BMP2A (SEQ ID NO:2 = translation of SEQ ID NO:1)

5	1	MVAGTRCLLA	LLLPQVLLGG	AAGLVPELGR	RKFAAASSGR
	41	PSSQPSDEVL	SEFELRLLSM	FGLKQRPTPS	RDAVVPPYML
	81	DLYRRHSGQP	GSPAPDHRLE	RAASRANTVR	SFHHEESLEE
	121	LPETSGKTTR	RFFFNLSSIP	TEEFITSAEL	QVFREQMQDA
	161	LGNNSSFHHR	INIYEIIKPA	TANSKFPVTR	LLDTRLVNQN
10	201	ASRWESFDVT	PAVMRWTAQG	HANHGFVVEV	AHLEEKQGVS
	241	KRHVRISRSL	HQDEHSWSQI	RPLLVTFGHD	GKGHPLHKRE
	281	KRQAKHKQRK	RLKSSCKRHP	LYVDFSDVGW	NDWIVAPPGY
	321	HAFYCHGECP	FPLADHLNST	NHAIVQTLVN	SVNSKIPKAC
	361	CVPTELSAIS	MLYLDENEKV	VLKNYQDMVV	EGCGCR
15					

Figure 3
Results of a loss of function validation experiment

